Understanding Libor

By MICHAEL J. DE LA MERCED

Chris Ratcliffe/Bloomberg News
The British Bankers' Association, an industry trade group, began publishing Libor in 1986.

The London interbank offered rate, more commonly known as Libor, is one of the most important numbers in the financial world. But until the Barclays scandal, it received scant public attention. Here is a primer.

Q. What is Libor?

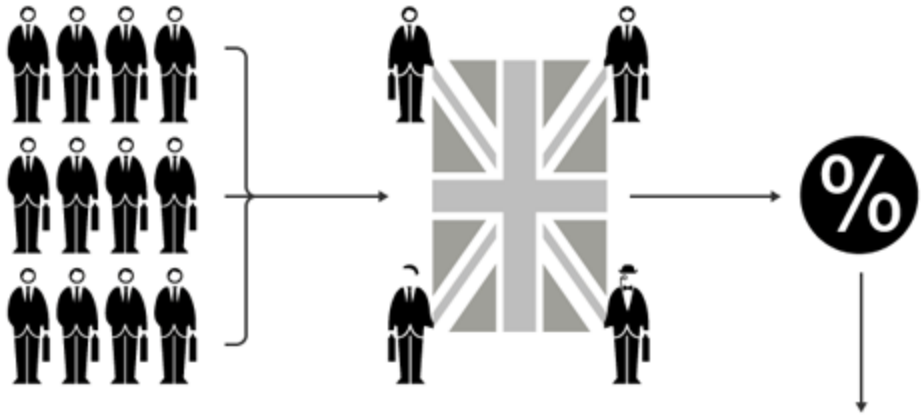
A. Libor is the average interest rate at which banks can borrow from one another. London is mentioned in its name because the benchmark is set in that city.

Essentially, Libor is one of the main rates used to determine the borrowing costs for trillions of dollars in loans. Interest rates on some mortgages, student loans and credit card accounts rose or fall when Libor moves. Often the rates are adjusted annually or quarterly, rather than every day.

Q. Why was Libor created, and by whom?

A. In the early 1980s, banks started looking for a standard benchmark to calculate the prices on an array of financial products, and the British Bankers' Association, an industry trade group, began publishing Libor on Jan. 1, 1986.

The idea was that instead of constantly haggling over the interest rates that would be charged for different types of loans, banks would have a uniform benchmark. There are actually 150 different Libor rates published every day. They cover 10 currencies and 15 maturities.



The New York Times

A settlement between the British bank Barclays and regulators may be the first in a series of cases against other banks that may have manipulated the Libor.

Q. How is Libor calculated?

A. For United States-dollar-denominated Libor, more than a dozen banks — including Citigroup, JPMorgan Chase, Bank of America, Barclays, UBS of Switzerland and others — estimate how much interest they would pay to borrow money on a short-term basis from other institutions. While the process is still overseen by the British Bankers' Association, the calculations are now performed by Thomson Reuters.

Thomson Reuters discards the four highest and four lowest submissions as outliers, and averages the remaining ones.

The data provider then publishes its calculations, generally around 11:30 a.m. London time, along with each bank's submissions. On July 10, 2012, the three-month United States dollar Libor rate, one of the most common Libor metrics, stood at 0.4576 percent. During the financial crisis of 2008, that rate rose to nearly 5 percent. At the time, banks considered lending to one another much riskier, and thus would not lend unless they earned a high interest rate in return.

Q. What are examples of how Libor is used?

A. Banks often ask borrowers to pay Libor plus an added amount of interest, reflecting the credit risk of the borrower.

Many mortgage lenders in the United States rely on Libor to determine the interest rates they charge for adjustable-rate mortgages. Typically, an adjustable-rate mortgage might be 2 to 3 percentage points over the six-month Libor rate.

Big corporations with strong credit typically would pay roughly 1 percentage point or less over Libor because they are considered safer bets than individual mortgage borrowers.

Q. How has Libor's use evolved over time?

A. Libor was primarily created as a benchmark for banks to determine borrowing costs — and it is largely used in the same manner today, albeit for a broader group of financial products. For instance, many banks now used Libor to set the prices on derivatives, the complicated financial instruments tied to commodities, interest rates, currencies and other assets.

Q. Why is Libor important?

A. After more than two decades, Libor still remains one of the most highly cited benchmarks in the financial world.

The British Bankers' Association has promoted the rate-setting process as highly transparent and impartial, making Libor a good benchmark for various financial products. The group has argued that no one institution can single-handedly alter the calculations behind the rate.

But amid the rate-manipulation scandal, the integrity of Libor has been called into question. In late June, Barclays agreed to pay $450 million to settle accusations by regulators that it had submitted false Libor rates to bolster its bottom line and deflect scrutiny about its health.

Q. Is Libor changing as a result of the rate-manipulation scandal?

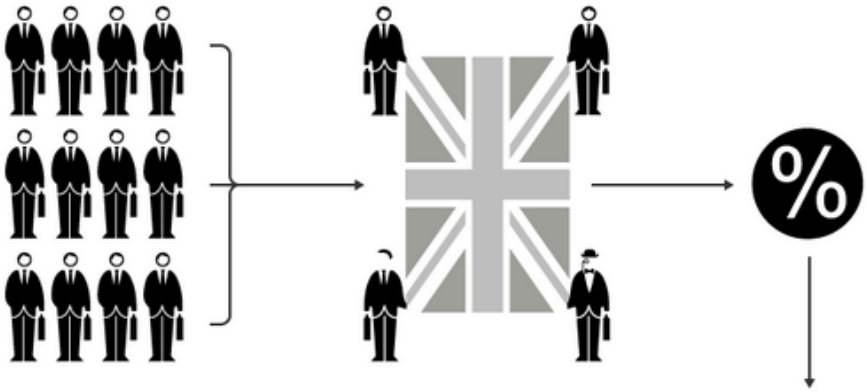
A. It's unclear at the moment. After regulators unveiled their settlement with Barclays, the B.B.A. said that it was "shocked" by the revelations and was reviewing all aspects of the Libor-setting process.

Behind the Libor Scandal

A settlement between the British bank Barclays and regulators may be the first in a series of cases against other banks that may have manipulated the Libor.

The **Libor** is a **benchmark interest rate** that affects how consumers and companies borrow money across the world. The rate is set by the British Bankers' Association (B.B.A.), an industry group in London.

How the Rate Is Set

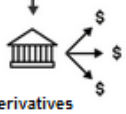


Banks Submit Figures
Each weekday, leading banks around the world each submit a figure to the B.B.A. based on the rate at which they estimate they could borrow funds from other banks.

British Bankers' Association
The B.B.A. throws out the highest and lowest 25 percent of submissions and averages the remaining rates. This is the Libor.

The Libor
It is calculated for 10 different currencies and 15 borrowing periods. There are 18 banks that submit rates for the U.S. dollar Libor.

What Is Affected by the Rate



Derivatives
The Libor is often used to price financial instruments like swaps transactions and futures contracts. At least an estimated $350 trillion in derivatives and other financial products are tied to it.

Loans
To calculate interest rates, some lenders use the Libor as a base and add additional interest based on the borrower. When the Libor goes up, rates and payments on loans tied to it can rise as well.

Mortgages
Of the mortgages in the United States that are adjustable-rate, about 45 percent of prime mortgages and 80 percent of subprime have interest rates based on the Libor.

Student Loans
About half of variable-rate private student loans are tied to the Libor.

What Barclays Did

1. Between 2005 and 2007, employees in Barclays' trading units convinced employees responsible for submitting Libor rates to alter the bank's rates based on their derivatives trading positions to bolster their own profits.
2. Certain traders at Barclays coordinated with other banks to alter their rates as well.
3. Later, during the height of the financial crisis, Barclays submitted artificially low rates to give the impression that the bank could borrow money more cheaply and was healthier than it was.

Two Kinds of Manipulation

From **2005 to 2007**, swaps traders often asked the Barclays employees who submit the rates to provide figures that would benefit the traders, instead of submitting the rates the bank would actually pay to borrow money.

SEPT. 13, 2006

"Hi Guys, We got a big position in 3m libor for the next 3 days. Can we please keep the lib or fixing at 5.39 for the next few days. It would really help. **We do not want it to fix any higher than that**. Tks a lot."

— *Senior trader in New York to submitter*

DEC. 14, 2006

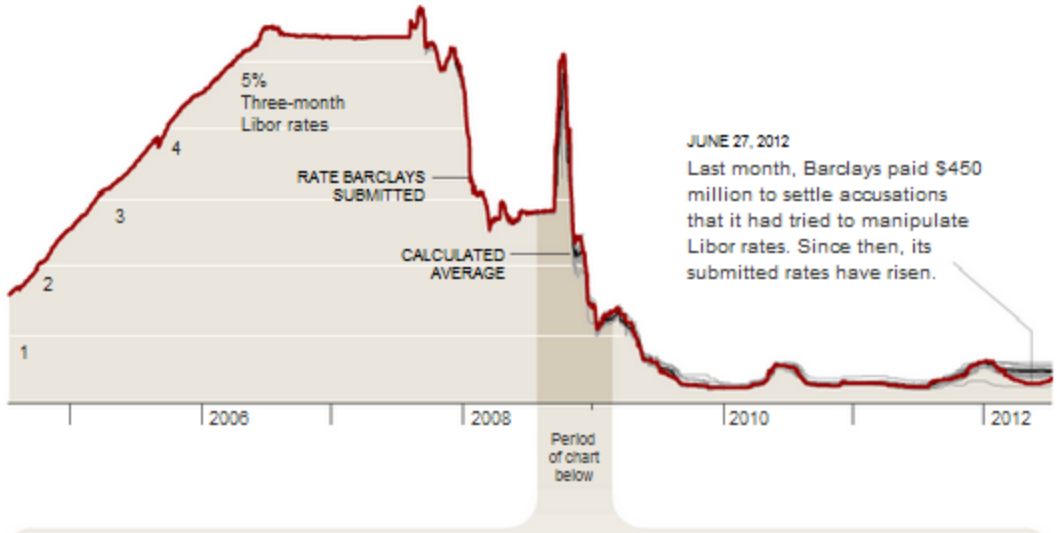
"For Monday we are very long 3m cash here in NY and would like the setting to be set **as low as possible** ... thanks"

— *Trader in New York to submitter*

JULY 29, 2007

"Pls go for 5.36 libor again, very important that the setting comes **as high as possible** ... thanks."

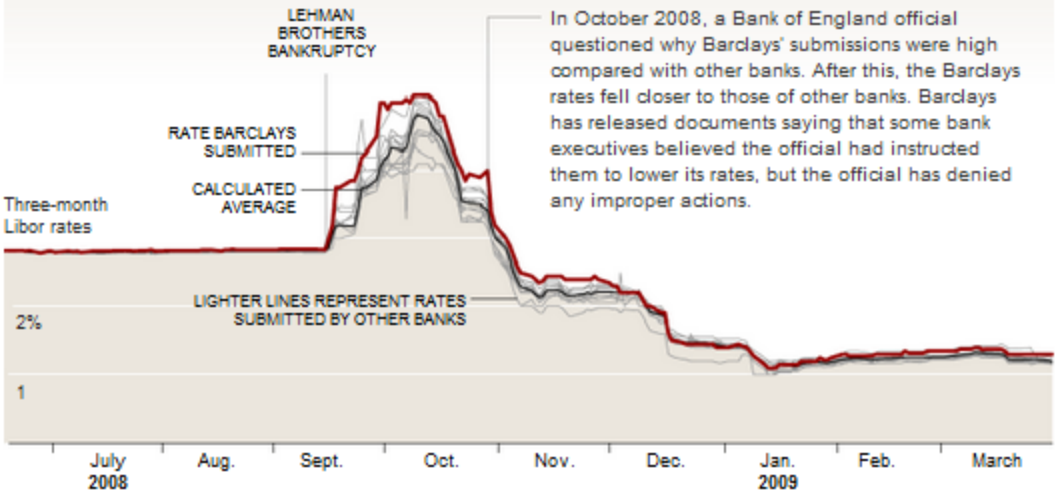
— *Trader in New York to submitter*



JUNE 27, 2012

Last month, Barclays paid $450 million to settle accusations that it had tried to manipulate Libor rates. Since then, its submitted rates have risen.

In **2008**, Barclays submitted artificially low figures to deflect scrutiny about its health.



In October 2008, a Bank of England official questioned why Barclays' submissions were high compared with other banks. After this, the Barclays rates fell closer to those of other banks. Barclays has released documents saying that some bank executives believed the official had instructed them to lower its rates, but the official has denied any improper actions.